



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

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August 7, 2017

Mr. William Beauregard  
TMC Leasing, LLC  
1 Spectacle Pond Road  
Littleton, MA 01460

**RE: Littleton**  
Transmittal No.: X274141  
Application No.: CE-17-017  
Class: *SM-25*  
FMF No.: 390761  
**AIR QUALITY PLAN APPROVAL**

Dear Mr. Beauregard:

The Massachusetts Department of Environmental Protection ("MassDEP"), Bureau of Air and Waste, has reviewed your Non-major Comprehensive Plan Application ("Application") listed above. This Application concerns the proposed construction and operation of a cement storage facility and concrete batch plant at your facility located at 80 Ayer Road in Littleton, Massachusetts ("Facility"). The Application bears the seal and signature of Paul J. Hanbury, Massachusetts Registered Professional Engineer Number 38757.

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 "Air Pollution Control" regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-O, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP's review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner/operator ("Permittee") must comply in order for the Facility to be operated in compliance with this Plan Approval.

# **1. DESCRIPTION OF FACILITY AND APPLICATION**

## **A. HISTORY AND DESCRIPTION OF OPERATIONS**

The Permittee currently maintains construction equipment at 80 Ayer Road in Littleton, Massachusetts. In addition, the Permittee formerly operated a concrete batch plant at this location. The concrete batch plant was shut down in 2008 and has now been dismantled. Currently the Permittee has no operations at this location requiring approval under 310 CMR 7.02.

On April 27, 2017, MassDEP received the present Plan Application Transmittal No. X274141 (“Application”) for installation of a new 180 cubic yards per hour concrete batch plant, and also a new cement unloading and storage facility. These facilities will generate point source emissions of Particulate Matter (PM) after control by dust collectors, and fugitive PM emissions from concrete aggregate handling and vehicle traffic on roadways.

## **B. PROJECT DESCRIPTION**

The Permittee proposes to build the concrete batch plant and the cement storage facility at the Facility. The Permittee or its assigns will operate the concrete batch plant and the cement storage facility.

The concrete plant will be a Stephens Manufacturing Empire Series truck-mix plant with a capacity of 180 cubic yards of concrete per hour. It will be designated Emission Unit (EU)1 and will be completely enclosed in a building. Aggregate will be delivered by truck to a storage building where it will be kept in bins. The aggregate will be picked up by front end loaders, placed on a conveyor, and conveyed to the concrete plant. Aggregate will be stored in silos above the concrete plant, along with cement. These materials will be weighed and delivered along with water to the trucks, where it will be mixed and delivered to customers.

Mineral dust particulate matter (PM) emissions will be generated by the handling of the raw materials. Fugitive emissions from storage and conveying will be minimized by storing the aggregate in the building and by using a covered conveyor. PM emissions from handling raw materials inside the concrete batch plant and storage silos will be controlled by a central dust collector rated at 99.99% control efficiency. The truck loading will use a “sock” (a flexible tube that feeds into the top of the truck receiving product) to minimize fugitive emissions from the truck loading.

The concrete plant will use a small hot water heater rated at 3.5 million Btu/hour. MassDEP has determined that this unit is exempt from plan approval and requirements are not listed for it in this Plan Approval. Although exempt from plan approval, this hot water heater will still be need to be listed on the Facility Source Registration/Emission Statements.

The cement storage facility will be manufactured by DCL Inc. (or equivalent). It was designated EU3 in the Application but is designated as EU2 in this Plan Approval. Cement will be unloaded from trucks or rail cars and lifted by a bucket elevator to the storage silos. There will be three silos, one with a capacity of 500 metric tons and two with a capacity of 460 metric tons each. Cement will empty from the silos and loaded into delivery trucks. Product transfer from trucks and railcars will be sealed and done under negative pressure to limit fugitive emissions. PM emissions from cement transfer will be controlled by a central dust collector. There will be three bin vent filter dust collectors, one for each storage silo. The feed chute and spout at the truck loadout area will be vented to a dust collector to control PM from truck loading.

### **C. APPLICABLE REGULATORY REQUIREMENTS**

#### **State Requirements**

##### **a) BACT**

310 CMR 7.02(8) requires Best Available Control Technology (BACT) for Plan Approvals. MassDEP has determined that BACT for this project consists of the following:

- 1) 0.008 grains per dry standard cubic foot (dscf) from the central baghouse serving the concrete plant and 0.003 grains per dscf from the dust collectors serving the cement storage facility.
- 2) Reduction of fugitive emissions from concrete plant activities by using good housekeeping measures which include keeping aggregate stored in a building; covering the conveyor from storage building to plant; paving roadways; sweeping roads; and watering as necessary.

##### **b) Air Dispersion Modeling**

MassDEP did not require air dispersion modeling for this project.

##### **c) Sound Monitoring and Modeling Study**

Operation of the proposed Facility will cause sound emissions that may cause noise. The Application described the following proposed sound-emitting equipment and associated sound suppression and sound transmission prevention features:

- 1) Selection of the quietest model available of each piece of equipment, with noise controls installed by the manufacturer ("Quiet Purchase");
- 2) Operation of pneumatic vibrators at the cement plant in 'silent mode';
- 3) Discharge silencers in the air streams exiting the dust collector fans;

- 4) Sound deadening materials in the walls and roof of the cement storage building and concrete plant building;
- 5) Locating equipment inside the sound insulated buildings;
- 6) Sound shielding train shed around the rail car unloading;
- 7) Noise barrier screens around noise sources located outside (such as dust collector exhausts).
- 8) Dual-mode back-up beepers on vehicles, set to make a “whoosh” sound after 9:00 PM nightly.

The Permittee proposed to operate at any time of day or night, (e.g. 24 hours per day, 7 days per week). Therefore MassDEP required the Permittee to measure the background sound levels throughout the quietest period of the night, when lowest background sound levels ( $L_{90}$ ) are expected. The Permittee conducted a week long background sound level monitoring and established ambient sound levels at the four property line locations. The lowest observed  $L_{90}$  from the four property lines, 27 dBA, was used as the background sound level for all nine residential locations.

The Permittee then calculated or modeled predicted sound impacts from measured ambient sound levels and project sound emissions for two different noise mitigation scenarios. It should be noted that the east property line is directly adjacent to the railroad load-out area in the cement plant. Table A summarizes the worst case predicted sound levels for Sound Mitigation Options 1 and 2 for the eight residential locations and four property line locations as described in the Application.

<b>Table A Worst Case - Predicted Sound Levels (dBA)</b>							
<b>Sound Modeling Locations</b>	<b>Lowest Background <math>L_{90}</math></b>	<b>Predicted Maximum Facility Sound Level</b>		<b>Total Predicted sound Level</b>		<b>Predicted Sound Level Change</b>	
		<b>Option 1</b>	<b>Option 2</b>	<b>Option 1</b>	<b>Option 2</b>	<b>Option 1</b>	<b>Option 2</b>
R1	27.0	29.1	27.1	31.2	30.1	4.2	3.1
R2	27.0	34.6	31.9	35.3	33.1	8.3	6.1
R3	27.0	31.2	32.3	32.6	33.4	5.6	6.4
R4	27.0	34.5	33.7	35.2	34.5	8.2	7.5
R5	27.0	29.3	28.3	31.3	30.7	4.3	3.7
R6	27.0	31.8	31.3	33.0	32.7	6.0	5.7
R7	27.0	32.5	32.8	33.6	33.8	6.6	6.8
R8	27.0	28.3	26.7	30.7	29.9	3.7	2.9
R9	27.0	28.6	26.8	30.9	29.9	3.9	2.9

<b>Table A Worst Case - Predicted Sound Levels (dBA)</b>							
<b>Sound Modeling Locations</b>	<b>Lowest Background L<sub>90</sub></b>	<b>Predicted Maximum Facility Sound Level</b>		<b>Total Predicted sound Level</b>		<b>Predicted Sound Level Change</b>	
		<b>Option 1</b>	<b>Option 2</b>	<b>Option 1</b>	<b>Option 2</b>	<b>Option 1</b>	<b>Option 2</b>
SM1 N PL	28.0	38.4	35.9	38.8	36.6	10.8	8.6
SM2 E PL	30.0	48.9	48.2	49.0	48.3	19.0	18.3
SM3 S PL	27.0	35.7	31.5	36.2	32.8	9.2	5.8
SM4 W PL	37.0	41.8	39.3	43.0	41.3	6.0	4.3

The worst case scenario for the sound modeling assumes that both the concrete and cement operations would be running at full capacity (both loading and unloading simultaneously), in the quietest part of the night and therefore it gave very conservative results. However, the Permittee has stated that the Facility will have limited operations at night (generally between 10 PM and 6 AM): it is unlikely that both the concrete plant and the cement plant would operate simultaneously; and that both loading and unloading operations would occur simultaneously at either plant during the night hours. Consequently MassDEP had the Permittee model a more realistic operational scenario of both plants operating simultaneously and separately. Those results are in Table B below.

<b>Table B Probable Scenario - Predicted Sound Levels (dBA)</b>							
<b>Sound Modeling Locations</b>	<b>Lowest Background L<sub>90</sub></b>	<b>Predicted Maximum Facility Sound Level</b>		<b>Total Predicted sound Level</b>		<b>Predicted Sound Level Change</b>	
		<b>Option 1</b>	<b>Option 2</b>	<b>Option 1</b>	<b>Option 2</b>	<b>Option 1</b>	<b>Option 2</b>
R1	27.0	26.7	21.8	29.9	28.1	2.9	1.1
R2	27.0	31.6	26.9	32.9	30.0	5.9	3.0
R3	27.0	28.3	26.5	30.7	29.8	3.7	2.8
R4	27.0	31.4	24.4	32.7	28.9	5.7	1.9
R5	27.0	26.7	23.2	29.9	28.5	2.9	1.5
R6	27.0	30.6	27.0	32.2	30.0	5.2	3.0
R7	27.0	30.1	26.3	31.8	29.7	4.8	2.7
R8	27.0	25.3	18.9	29.2	27.6	2.2	0.6
R9	27.0	26.1	19.0	29.6	27.6	2.6	0.6

<b>Table B Probable Scenario - Predicted Sound Levels (dBA)</b>							
<b>Sound Modeling Locations</b>	<b>Lowest Background L<sub>90</sub></b>	<b>Predicted Maximum Facility Sound Level</b>		<b>Total Predicted sound Level</b>		<b>Predicted Sound Level Change</b>	
		<b>Option 1</b>	<b>Option 2</b>	<b>Option 1</b>	<b>Option 2</b>	<b>Option 1</b>	<b>Option 2</b>
SM1 N PL	28.0	36.5	32.2	37.1	33.6	9.1	5.6
SM2 E PL	30.0	43.0	34.0	43.2	35.5	13.2	5.5
SM3 S PL	27.0	33.8	23.9	34.6	28.7	7.6	1.7
SM4 W PL	37.0	38.4	32.4	40.8	38.3	3.8	1.3

Based on review of the engineering design of the Facility including sound mitigation measures and predicted facility sound level impacts, MassDEP has determined that the design incorporates sound suppression and sound transmission prevention elements that constitute necessary equipment, service and maintenance, and other necessary precautions to prevent unnecessary sound emissions, as required by 310 CMR 7.10. MassDEP also has determined that compliance with this Plan Approval and MassDEP regulations will ensure compliance with the Town of Littleton noise bylaw.

After the approved Facility commences operation, the Permittee shall conduct a sound survey (Table 3, Condition 5). The sound survey shall be performed in accordance with a protocol reviewed and approved by MassDEP in accordance with Table 5, Condition 3.

### **Federal Requirements**

The Facility is not subject to any regulations under 40 CFR Part 60, 61, or 63.

## **2. EMISSION UNIT IDENTIFICATION**

Each Emission Unit (“EU”) identified in Table 1 is subject to and regulated by this Plan Approval:

<b>Table 1</b>			
<b>EU</b>	<b>Description</b>	<b>Design Capacity</b>	<b>Pollution Control Device</b>
1	Stephens Mfg. Empire-Series Truck-mix Concrete Plant	180 cubic yards per hour	PCD1 Central Dust Collector—C&W Mfg. BP-15-- @9000 cfm
2	DCL Inc. (or equivalent) Cement Storage Facility including:	Two (2) silos @460 metric tons and One (1) silo @500 metric tons	
	• Rail Car unloading		PCD2 Main Dust Collector serving general facility cement conveying – AMEC Foster –Wheeler Wheelabrator Size 43, Model 36 WCC @4028 cfm
	• Three storage silos		PCD3, 4, &5: Three Silo Dust Collectors—AMEC Foster –Wheeler Wheelabrator Size 22, Model 36 WCC @1399 cfm
	• Truck loadout		PCD6: Loadout Dust Collector—DCL Model VMV-660 @3000 cfm

**Table 1 Key:**

EU = Emission Unit  
cfm = cubic feet per minute

PCD = Pollution Control Device  
@ = rated at

### 3. **APPLICABLE REQUIREMENTS**

#### A. **OPERATIONAL, PRODUCTION and EMISSION LIMITS**

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2:

<b>Table 2</b>						
<b>EU</b>	<b>Operational / Production Limit</b>	<b>Air Contaminant</b>	<b>Emission Limit<sup>1</sup></b>			
			<b>gr/dscf</b>	<b>lb/hr</b>	<b>TPM</b>	<b>TPY</b>
1 <sup>2</sup>	1. 240,000 cubic yards per year and 30,000 cubic yards per month	PM	0.008	15.5	1.10	8.76
		PM <sub>10</sub>		5.72	0.48	3.82
		PM <sub>2.5</sub>		0.72	0.06	0.48
2	2. 215,000 metric tons per year and 26,875 metric tons per month	PM	0.003	0.12	0.01	0.04
		PM <sub>10</sub>		0.08	0.001	0.03
		PM <sub>2.5</sub>		0.08	0.001	0.03
Facility-wide		Visible Emissions/Opacity	No visible emissions from dust collector exhausts. Fugitive dust visible emissions from paved surfaces and material handling minimized by good housekeeping measures.			

**Table 2 Key:**

EU = Emission Unit

PM<sub>10</sub> = Particulate Matter less than or equal to 10 microns in diameter

TPY = tons per consecutive 12-month period

gr/dscf = grains per dry standard cubic foot

PM = Total Particulate Matter (filterable)

PM<sub>2.5</sub> = Particulate Matter less than or equal to 2.5 microns in diameter

TPM = tons per month

PCD = Pollution Control Device

**Table 2 Notes**

Note 1: Actual monthly and yearly emissions shall be calculated using emission factors as detailed in the Application or as modified by results from stack testing.

Note 2: EU1 tons per year and tons per month emissions include both EU1 dust collector stack emissions and fugitive dust emissions from the Facility.

**B. COMPLIANCE DEMONSTRATION**

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5:



<b>Table 3</b>	
<b>EU</b>	<b>Monitoring and Testing Requirements</b>
1 and 2	1. The Permittee shall perform Visolite tests on all dust collectors prior to facility start-up each spring, before re-start after any major maintenance, and before re-start after any bag replacement work.
	2. The Permittee shall monitor the pressure drop across the filters of all dust collectors at least one time per calendar day when the facility is operating. The Permittee shall install local alarms on all dust collectors which will send an audible and visible alarm when the pressure drop is too high or too low.
1 and 2	3. The Permittee shall conduct visual observations of the exhaust from all dust collectors on a daily basis, and if any opacity is observed, shall correct the problem immediately. The Permittee shall observe the loading of product into trucks to ensure that there is no visible dust blowing from improperly connected or faulty truck loading connectors.
1 and 2	4. The Permittee shall monitor the total concrete production and total cement throughputs to ensure compliance with the production limits specified in Table 2.
Facility-wide	<p>5. The Permittee shall conduct a sound survey during daytime and nighttime operations in accordance with a MassDEP-approved protocol. The survey shall be conducted within 180 days of the commencement of continuous operation of the Facility.</p> <p>The Permittee shall work in full cooperation with MassDEP if the sound survey results deviate from the predicted sound levels specified in this Plan Approval. The reason for the deviation shall be investigated and changes shall be implemented to remediate any excess sound being generated. MassDEP shall be notified in advance of any physical changes at the Facility to reduce sound, and of the times any sound measurements will be made to determine the effect of the changes made</p>
Facility-wide	6. The Permittee shall routinely monitor the roadways and other paved surfaces for any visible dust emissions from vehicle traffic, and shall vacuum sweep and/or water the surfaces as warranted by conditions to remove dust from the paved surfaces.
Facility-wide	7. The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
	8. If and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and Regulation 310 CMR 7.13.

**Table 3 Key:**

EU = Emission Unit  
USEPA = United States Environmental Protection Agency

PCD = Pollution Control Device

<b>Table 4</b>	
<b>EU</b>	<b>Record Keeping Requirements</b>
1 and 2	1. The Permittee shall keep records of the Visolite testing, pressure drop monitoring, and visible emissions monitoring of the dust collectors required in Table 3.
	2. The Permittee shall keep records of the amounts of concrete produced and cement processed. These records shall be kept on a monthly basis so that compliance with the monthly and 12-month rolling total limits can be easily demonstrated.
1 and 2	3. The Permittee shall establish and use a maintenance, inspection and testing log to record and document maintenance, inspection and testing activities on the subject equipment and associated dust collectors. These records shall include, at a minimum, all visolite testing performed, replacement of leaking filter cartridges or bags, daily equipment inspections, stack test results, etc.
Facility-wide	4. The Permittee shall maintain adequate records on-site to demonstrate compliance status with all operational, production, and emission limits contained in Table 2 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve-month period (current month plus prior eleven months). These records shall be compiled no later than the 15 <sup>th</sup> day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at <a href="http://www.mass.gov/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html#WorkbookforReportingOn-SiteRecordKeeping">http://www.mass.gov/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html#WorkbookforReportingOn-SiteRecordKeeping</a> .
	5. The Permittee shall maintain records of monitoring and testing as required by Table 3.
	6. The Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMP for the EU(s) and PCDs approved herein on-site.
	7. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s), PCD(s) and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.
	8. The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s) and PCDs and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.
	9. The Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
	10. The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.
	11. The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.

**Table 4 Key:**

EU = Emission Unit  
SOMP = Standard Operating and Maintenance  
Procedure

PCD = Pollution Control Device  
USEPA = United States Environmental Protection  
Agency

<b>Table 5</b>	
<b>EU</b>	<b>Reporting Requirements</b>
1 and 2	1. The Permittee shall submit a compliance emission test protocol to MassDEP's Central Regional Office for review and approval at least 30 days prior to the scheduled commencement of said testing.
	2. The Permittee shall submit an emission test report to MassDEP's Central Regional Office for review within 60 days of the completion of any required compliance stack testing.
	3. The Permittee shall submit a sound survey protocol for the required initial compliance test to MassDEP's Central Regional Office for review and approval at least 30 days prior to the scheduled commencement of said survey.
1 and 2	4. The Permittee shall submit the sound survey results to MassDEP's Central Regional Office, in writing, attention BAW Permit Chief, within 45 days of completion of the sound survey.
Facility-wide	5. The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a "Responsible Official" as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).
	6. The Permittee shall notify the Central Regional Office of MassDEP, BAW Permit Chief by telephone: 508-767-2845, email: roseanna.stanley@ massmail.state.ma.us and CERO.Air@massmail.state.ma.us, or fax : 508-792-7621, as soon as possible, but no later than three (3) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted Permit Chief at MassDEP within ten (10) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).
	7. The Permittee shall report every three years to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form.

**Table 5 Key:**

EU = Emission Unit

#### **4. SPECIAL TERMS AND CONDITIONS**

- A. The Permittee is subject to, and shall comply with, the Special Terms and Conditions as contained in Table 6 below:

<b>Table 6</b>	
<b>EU</b>	<b>Special Terms and Conditions</b>
1	1. The Permittee shall store raw material aggregate only inside the storage building .
1	2. The Permittee shall use only pre-washed aggregate in the concrete batch plant.
1	3. The Permittee shall fully cover the aggregate transfer conveyor from the storage building to the concrete plant.
1	4. The Permittee shall construct and maintain, for the life of the Project, the following noise mitigation measures, as detailed in the submitted Noise Assessment Report for the Facility. <ul style="list-style-type: none"> <li>a) A sound insulated building (with materials in the roof and walls to attenuate sound transmission, as described in the Application) which houses the concrete plant equipment;</li> <li>b) Selection of plant equipment provided with noise controls installed by the manufacturer (“Quiet Purchase”);</li> <li>c) Operation of the Hopper Vibrators in Silent Mode at night;</li> <li>d) Silencer on the air discharge of the blower serving the dust collector;</li> <li>e) Sound barriers around the dust collectors located outdoors, extending 3 feet above the fan; and</li> <li>f) Dual-mode back-up beepers on vehicles, set to make a “whoosh” sound after 9:00 PM nightly.</li> </ul>
2	5. The Permittee shall construct and maintain, for the life of the Project, the following noise mitigation measures, as detailed in the submitted Noise Assessment Report for the Facility. <ul style="list-style-type: none"> <li>a) A sound insulating surround (with materials in the roof and walls to attenuate sound transmission, as described in the Application) which screens the cement plant equipment;</li> <li>b) A sound insulated rail shed, 80 feet long;</li> <li>c) Selection of plant equipment provided with noise controls installed by the manufacturer (“Quiet Purchase”);</li> <li>d) Operation of the Rail Car Pneumatic Vibrators in Silent Mode inside the cement storage facility rail shed at nighttime;</li> <li>e) Silencers on the air discharges of the blowers and fans serving the dust collectors;</li> <li>f) Silencers on the air discharges of the blowers serving the air dryers;</li> <li>g) Discharge of PCD2 and PCD6 baghouses inside the sound insulating surround of the cement plant;</li> <li>h) Sound barriers around dust collectors and bucket elevator located outdoors, extending 3 feet above the fan and top of elevator;</li> <li>i) Dual-mode back-up beepers on vehicles set to make a “whoosh” sound after 9:00 PM nightly.</li> </ul>
1 and 2	6. Nighttime activities are defined in this Plan Approval as between the hours of 10:00 PM and 6:00 AM. However the Littleton Noise Bylaw defines night as 9:00 PM and 7:00 AM on all days except Sundays and legal holidays when it is between 9:00 PM and 12:00 noon.

<b>Table 6</b>	
<b>EU</b>	<b>Special Terms and Conditions</b>
1 and 2	<p>7. The Permittee shall make every effort to minimize nighttime activity. Such efforts shall include, but be not limited to, the following:</p> <ul style="list-style-type: none"> <li>a) Performing noise-generating plant maintenance during daylight hours;</li> <li>b) Not running both the concrete plant and cement processes at the same time;</li> <li>c) Taking deliveries of aggregate during daylight hours;</li> <li>d) Loading raw material aggregate into the concrete plant silos during daylight hours;</li> <li>e) Moving cement rail cars around the yard during daylight hours</li> </ul>
1 and 2	8. Should MassDEP receive complaints regarding excessive noise, the Permittee shall work with MassDEP to determine the source of the noise and take additional steps to mitigate the noise including, but not limited to, implementing additional sound controls.
1 and 2	9. If visible emissions are observed from a dust collector on EU1 or EU2, the Permittee shall remove the EU from service as quickly as practical and repair the dust collector before returning the EU to service.
1 and 2	<p>10. The Permittee shall maintain the dust collectors pressure drops in the following ranges (inches water column):</p> <ul style="list-style-type: none"> <li>a) PCD 1: 3-6</li> <li>b) PCD 2: 1-8</li> <li>c) PCD 3, 4, and 5: 1-8</li> <li>d) PCD 6: 2-10</li> </ul>
	11. The Permittee shall install devices to detect the level in each cement silo and to prevent overfilling of the silos.
	12. The Permittee shall install devices to detect the level in the collection hopper of each dust collector and to prevent overfilling of the collection hoppers.
1 and 2	13. The Permittee shall keep spare dust collector bags on-site in accordance with manufacturers recommendations.
1 and 2	14. The Permittee shall employ all reasonable good housekeeping practices to minimize fugitive particulate emissions from the handling of material at the facility.
1 and 2	15. The Permittee shall conduct a complete inspection of all the dust collectors prior to plant startup each spring and after any major maintenance work.

<b>Table 6</b>	
<b>EU</b>	<b>Special Terms and Conditions</b>
Facility-wide	16. The Permittee shall use the following good housekeeping measures to minimize fugitive dust emissions: <ul style="list-style-type: none"> <li>a) Pave all roadways, including vehicle access and material delivery and transfer areas.</li> <li>b) Maintain all paved areas free of dust to minimize truck drag out and the possibility of dust becoming air borne.</li> <li>c) Apply water to paved areas using either a water truck or fine mist nozzles, when conditions warrant.</li> <li>d) Clean the paved areas with a mechanical street sweeper at least twice per week, and more frequently when necessary.</li> <li>e) Post the speed limit as 10 miles per hour on the roadways, and enforce the speed limit.</li> </ul>
Facility-wide	17. The Permittee shall correct visible dust emissions that occur from the concrete production, vehicular site traffic or public roadway as soon as reasonably possible but no later than the start of the next operating day.
	18. Compliance with the conditions of this Plan Approval does not relieve the Permittee from the obligation to comply with 310 CMR 7.01 and 310 CMR 7.10 when operating the approved Facility or any other activities at the Facility.

**Table 6 Key:**

EU = Emission Unit

- B. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including, but not limited to, rain protection devices known as “shanty caps” and “egg beaters.”
- C. The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7, for the Emission Units that are regulated by this Plan Approval:

<b>Table 7</b>				
<b>EU/PCD</b>	<b>Stack Height Above Ground (feet)</b>	<b>Stack Inside Exit Dimensions (feet)</b>	<b>Stack Gas Exit Velocity Range (feet per second)</b>	<b>Stack Gas Exit Temperature Range (°F)</b>
EU 1 PCD1	33.4	2	17-35	ambient
EU 2 PCD 3	80	0.708 X 0.646	25-51	ambient
EU 2 PCD 4	80	0.708 X 0.646	25-51	ambient
EU 2 PCD 5	80	0.708 X 0.646	25-51	ambient

**Table 7 Key:**

EU = Emission Unit

°F = Degree Fahrenheit

## **5. GENERAL CONDITIONS**

The Permittee is subject to, and shall comply with, the following general conditions:

- A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).
- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.

- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local laws or regulations now or in the future.
- F. The Application is incorporated into this Plan Approval by reference. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.
- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.
- J. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

## **6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT**

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain “Fail-Safe Provisions,” which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

## **7. APPEAL PROCESS**

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.



The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) and a completed Adjudicatory Hearing Fee Transmittal Form, a copy of which is attached hereto, must be mailed to:

Commonwealth of Massachusetts  
Department of Environmental Protection  
P.O. Box 4062  
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Enclosed is a stamped approved copy of the application submittal.

Should you have any questions concerning this Plan Approval, please contact Paul Dwiggins by telephone at 508-767-2760 or in writing at the letterhead address.

This final document copy is being provided to you electronically by the  
Department of Environmental Protection. A signed copy of this document  
is on file at the DEP office listed on the letterhead.

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Roseanna E. Stanley  
Permit Chief  
Bureau of Air and Waste

Enclosures:

- Adjudicatory Hearing Fee Transmittal Form
- Stamped Plan Application

ecc: Littleton Board of Health  
Littleton Fire Department  
MassDEP/Boston - Yi Tian  
ETG, Inc.